computer communications

INDEX TO VOLUME 6: 1983

AUTHOR

Beauchamp, K Computer network development at Dartmouth College 308
Blyth, D Standardization of text transfer in open systems 253
Chlamtac, I and Eisenger, M Voice/data integration on Ethernet — backoff and priority considerations 236
Colvin, A CSMA with collision avoidance 227
Davies, P and Ghani, F A Access protocols for an optical-fibre ring network 185
Davis, R H, Saunders, K and Shaman, T A computerized diary facility 297
Gee, K Choosing a local are network 313
Gopal, I and Kermani, P Performance of stop-and-wait protocols over high-delay links 115
Harwood, P Fibre optics for short-haul communications links 32
Hutchison, D Terminal concentrator for an Ethernet-style local network 291
Knight, A Local networking at the Royal Bank of Scotland 192
Köhler, W Common data communications protocols in the FRG 283
Kuwabara, M Trends in Japanese DDX applications 73
Listani, M and Villani, F An X.25-compatible protocol for packet voice communications 23
Majithia, J C and Li, San-gi Buffer analysis of an integrated voice and data terminal 171
Niznik, C and Newcomb, B Computer networking for the robotic neural and sensory systems 65
Owen, K Data communications: IFIP's international 'network' of experts 141
Probert, D Towards expert systems for telecommunications policy analysis 58
Robinson, J A and Coakley, F P Picture coding for photovideotex 3
Sanders, P W and Varadharajan, V Secure communications between microcomputer systems 245
Schindler, S, Flasche, U, Roanen, J and Widlewski, H Open systems interconnection — the teletex-based session protocol: Part 1 78
Schindler, S, Flasche, U, Roanen, J and Widlewski, H Open systems interconnection — the teletex-based session: Part 2 126
Sykas, E D, Karvelas, D E and Protonotarios, E N A combined URN and TDMA scheme for multiple-access protocols 199
Tham, Y K and Hume, J N P Analysis of voice and low-priority data traffic by means of brisk periods and slack periods 14
Thursby, R Managing a computer bureau 147
Vilardell, J and Kram, A A presentation protocol for videotex systems 120
Weaving, K Broadcast service implementation on a packet-switched network 178
Wood, J Corporate videotex systems and cost effectiveness 90

TITLE

Access protocols for an optical-fibre ring network **Davies, P and Ghani, F A** 185
A combined URN and TDMA scheme for multiple-access protocols **Sykas, E D, Karvelas, D E and Protonotarios, E N** 199
A computerized diary facility **Davis, R H, Saunders, K and Shaman, T** 297
Analysis of voice and low-priority data traffic by means of brisk periods and slack periods **Tham, Y K and Hume, J N P** 14
An X.25-compatible protocol for packet voice communications **Listani, M and Villani, F** 23
A presentation protocol for videotex systems **Vilardell, J and Kram, A** 120
Broadcast service implementation on a packet-switched network **Weaving, K** 178
Buffer analysis of an integrated voice and data terminal **Majithia, J C and Li, San-gi** 171
Choosing a local area network **Gee, K** 313
Common data communications protocols in the FRG **Köhler, W** 283
Computer network development at Dartmouth College **Beauchamp, K** 308
Computer networking for the robotic neural and sensory systems **Niznik, C and Newcomb, B** 65
Corporate videotex systems and cost effectiveness **Wood, J** 90
CSMA with collision avoidance **Colvin, A** 227
Data communications: IFIP's international 'network' of experts **Owen, K** 141
Fibre optics for short-haul communications links **Harwood, P** 32
Local networking at the Royal Bank of Scotland **Knight, A** 192
Managing a computer bureau **Thursby, R** 147
Open systems interconnection — the teletex-based session protocol: Part 1 **Schindler, S, Flasche, U, Oranen, J and Widlewski, H** 78
Open systems interconnection — the teletex-based session protocol: Part 2 **Schindler, S, Flasche, U, Oranen, J and Widlewski, H** 126
Performance of stop-and-wait protocols over high-delay links **Gopal, I and Kermani, P** 115
Picture coding for photovideotex **Robinson, J A and Coakley, F P** 3
Secure communications between microprocessor systems **Sanders, P W and Varadharajan, V** 245
Standardization of text transfer in open systems **Blyth, D** 253
Terminal concentrator for an Ethernet-style local network **Hutchison, D** 291
Towards expert systems for telecommunications policy analysis **Probert, D** 58
Trends in Japanese DDX applications **Kuwabara, M** 73
Voice/data integration on Ethernet — backoff and priority considerations **Chlamtac, I and Eisenger, M** 236

SUBJECT

BOOK REVIEWS

A practical guide to computer communication and networking **Deasington, R J** 213
Local area network: issues, products and developments **Cheong, V E and Hirschheim, R A** 326
Techniques in data communications **Glasgal, R** 213
Telecommunications — pressures and policies for change **OECD** 326
Teleconferencing technology and applications **Olgren, C H and Parker, L A** 264
Tutorials in modern communication **Lawrence, V B, LoCicero, J L and Milstein, L B** 213

CALENDAR

56, 112, 168, 224, 280, 336

CASE STUDY

Computer network development at Dartmouth College **Beauchamp, K** 308
Local networking at the Royal Bank of Scotland **Knight, A** 192

INTERFACE

Cable TV study 266
Canadian inquiry into Bell reshuffle 37
Caution over electronic trading 38
Cooperation in design of fibre-optic LAN 265
Digital telephone system approved by Deutsche Bundespost 266
EEC initiates office automation study throughout Europe 215
Electronic mail/viewdata systems licensed 155
European information industry survey 325
European Institute for Information Management aims to train top-level computing professionals 214
Fibre-optic links along railways 325
Fibre-optic project 324
Fire protection for DP rooms 155
French videotex trial grows 155
Funding for CHILL/ADA software development 214
Interactive viewdata project 94
Management system for Intelsat 324
Optical fibre research 324
Plenipotentiary conference of the ITU 37
Study foresees increased exports of information technology from UK 37
Survey finds that 98% of viewdata/teletext sets use UK standard 265
Telidon development programme 325
Transatlantic videoconferencing 38
UK/Canada satellite project 38
UK data protection bill questioned and answered 265
UK data protection legislation 94
UK government urged to expand IT programme to cover LANs/viewdata 215
USA/Canada satellite agreement 155

LITERATURE REVIEW

49, 105, 161, 330

NETWORKS

Analysis of voice and low-priority data traffic by means of brisk periods and slack periods **Tham, Y K and Hume, J N P** 14
Broadcast service implementation on a packet-switched network **Weaving, K** 178
Buffer analysis of an integrated voice- and data terminal **Majithia, J C and Li, San-gi** 171
Computer networking for the robotic neural and sensory systems **Niznik, C and Newcomb, B** 65
Terminal concentrator for an Ethernet-style local network **Hutchison, D** 291
Trends in Japnaese DDX applications **Kuwabara, M** 73
Voice/data integration on Ethernet — backoff and priority considerations **Chlamtac, I and Eisenger, M** 236

OFFICE AUTOMATION

A computerized diary facility **Davis, R H, Saunders, K and Shaman, T** 297

OVERVIEW

Data communications: IFIP's international 'network' of experts **Owen, K** 141

PRODUCT REVIEW

Automatic calling from data station 102
Automatic measurement and control 159
Bank network 104
Barcode readers for IBM systems 103
Baseband modems extend networks 47
Communications diagnosis and control 103
Communications management 274
Compact telex communicator 157
Data acquisition and control 47
Datacomm fault finder 327
Data communications testing 328
Data encryptor safeguards communications 272
Data/telegraph interface 329
Data/telex exchange 271
Desktop facsimile terminal 157
Distributed data entry 328
Distributed monitoring and control 45
Electricity mains carry data 48
Emulation for ICL computers 274
Error-free communications system 272
Ethernet/X.25 interfaces 46
Facsimile for data networks 104
Fibre-optics for LAN 46
Fibre-optics system 216
Flexible networking 327
Hand-held electronic mail 329
Hyperchannel network adapters 219
IEEE bus extender 46
Integrated message processor 216
LAN controller 103
Local area network 219
Micro LAN 159
Network communications software 158
Network control software 273
Network gateway connects up to eight LANs 270
Networking for Sirius 1 274
Personal computer communications 273
Personal computer LAN 102
Portable now in UK 45
Portable telemetry system 104
POS terminal 160
Private viewdata system 219
Programmable signature analyser 160
Remote station data acquisition 217
Scrambling device for broadcast TV 102
Security by telephone 48
Signal conditioning system 218
Speech/data communications network 156
Switching multiplexer 327
Tape accelerator 218
Telephone-linked local network 159
Telephone management 48
Transaction processing through viewdata 47
TV pictures by telephone 270
US/European PCM channel conversion 158
VAX communications controller 271
Viewdata editing system 217
Voice messaging system 270

PUBLICATIONS

Advertising and the new electronic media 150
Annual census of information processing 1983 260
Business minicomputers for the larger and medium-size company 96
Cellular mobile radio 320
Centralized and distributed data entry in Europe 153
Communications processor market in Europe 39
Data communications equipment markets 1980–1986 42
Downloading and teledelivery of computer software, games, music and video 261
European speech recognition and synthesis markets 43
Facsimile equipment market 151
Facsimile markets 211
Fibre-optic markets 259
Fibre-optic sensors — market opportunities and technology trends 211
Fibre optics for process control and business communications 40
Home telecommunications in Europe 153
Impact of broadband local area networks 42

Impact of personal computer local area networks 41
Interactive video systems and services 320
Japanese penetration into the US communications, data processing and office equipment markets 321
Local area networks: applications and industry analysis 262
Market for satellite private business network terminals in the US 39
Micro DBMS — the universal applications 208
Military C^3I market 210
Modems, multiplexers and concentrators: technology and markets 44
Optical character recognition markets 40
PBX markets 154
Personal computer LANs 208
Process control instrumentation in Latin America 210
Programmable controller networks in the US 323
Stand-alone data loggers in Europe 154
Store and forward voice switching 258
Telecommunications equipment leasing 98
Telecommunications strategies for the 1980s 43
Teleconferencing product introductions proliferate — interactive audio/graphics workstations have arrived 99
Teleconferencing services and equipment markets 152
Telephone call accounting market in the US 263
Teleshopping 212
The intelligent communications market in the USA 96
The interactive videodisc software market 262
The management aid workstations market in Europe 212
The market for advanced business communications in the USA 260
The POS market in Europe 98
UK telecommunications market opportunities 322
Videoconferencing 100
Videotex and teletext home market in the United States 258
Videotex vs. audiotex — the competition for home information and transaction services 322
What future for British Telecom 260
Wholesale banking information systems market 209

SECURITY

Secure communications between microcomputer systems **Sanders, P W and Varadharajan, V** 245

STANDARDS AND PROTOCOLS

Access protocols for an optical-fibre ring network **Davies, P and Ghani, F, A** 185
A combined URN and TDMA scheme for multiple-access protocols **Sykas, E D, Karvelas, D E and Protonotarios, E N** 199
An X.25-compatible protocol for packet voice communications **Listani, M and Villani, F** 23
A presentation protocol for videotex systems **Vilardell, J and Kram, A** 120
BS 5397: High-level datalink control procedures 268
BS 6192: Computer programming language PASCAL 267
Call for world videotex standard 36
Common data communications protocols in the FRG **Köhler, W** 283
Communications standards 269
Effects of radiation on digital circuits 95
Electronic mail standards 268
File-transfer protocol 95
Independent approval for telecoms equipment in the UK 36
Interactive protocol analyser 267
Network processor supports X.25 95
Network protocol 95
Open systems interconnection — the teletex-based session protocol: Part 1 **Schindler, S, Flasche, U, Oranen, J and Widlewski, H** 78
Open systems interconnection — the teletex-based session protocol: Part 2 **Schindler, S, Flasche, U, Oranen, J and Widlewski, H** 126
Performance of stop-and-wait protocols over high-delay links **Gopal, I and Kermani, P** 115
Portable software standards 269
Specifications for 32 bit Multibus standard 268
Standardization of text transfer in open systems **Blyth, D** 253

SYSTEMS REVIEW

Automatic weather reporting 54, 276
Banking system 109
Belgian link to Eutelsat 220
Chemical process control 53
Chinese microwave system 279
Communications controllers integrate data and text 111
Computerized transport system 167
Computers for breakfast 53
Control system for glass production 333
Data network 279
Digital exchange system 166
Digital microwave transceivers 167
Digital PABXs help fight crime 334
Digital switches for New York 53
Digital Turkey 333
Electricity bills — electronically 52
Electronic mail 334
European radio network 221
Failsafe telex network 221
Fibre-optic LAN 278
Fibre-optic link for shipyard 221
Fibre-optic modem system 277
Fibre optics for viewdata system 111
Flight information system 278
French videotex terminals for US financial data networks 109
Frequency control for voice/data network 164
High-speed modems for bank 52
Holidays on viewdata 52
India extends telephone network 223
International hotel network 223
International network for airline 222
LAN for air traffic control 165
LAN helps UK unemployed 164
Local area networks for BT 333
Message switching for Arabian airline 111
Multichannel radio network 167
Navy net 334
Networking for manufacture of electronic equipment 277
Oil production telemetry 335
Optical fault finding 166
Optical transmission in Mexico City 275
OSI software 276
Personal computer networking 277
Personal interface for financial dealers 275
Port selectors 335
Private videotex 165
Private viewdata in the 'wired city' 165
Protection for System X 110
Public data services in Sweden 166
Radar-based system keeps missiles out of harm's way 55
Rada data processing 222
Radar system for air traffic control 276
Railway information system 223
Rural telephone exchanges 167
Satellite network service 54
Satellite tracking system 110
Security system for merchant bank 278
Signalling system for Royal Navy 223
South African viewdata network 275
Talking telephone checks credit cards 278
Telemetry for oil company 276
Telephone directory enquiry service 220
Traffic monitoring 221
Transatlantic satellite service 333
Videotex concentrators 110
Videotex on trial in Switzerland 109
Virtual database project 220

TECHNIQUES

CSMA with collision avoidance **Colvin, A** 227

TELECOMMUNICATIONS

Towards expert systems for telecommunications policy analysis **Probert, D** 58

USER FOCUS

Choosing a local area network **Gee, K** 313
Corporate videotex systems and cost effectiveness **Wood, J** 90
Fibre optics for short-haul communications links **Harwood, P** 32
Managing a computer bureau **Thursby, R** 147

VIDEOTEX

Picture coding for photovideotex **Robinson, J A and Coakley, F P** 3